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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,891	04/30/2001	Tetsuya Toshine	Q64332	1136

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SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER

ANGEBRANDT, MARTIN J

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/843,891

Applicant(s)

TOSHINE ET AL.

Examiner

Martin J Angebrannt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004 and 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. The response provided by the applicant has been read and given careful consideration. The previous rejection under the second paragraph of 35 U.S.C. 112 is withdrawn based upon the amendment to the claims. Responses to the arguments of the applicant are presented after the first rejection to which they are directed. The addition of Kushibiki et al. addresses the embodiment of claim 7 and the addition of Kaule et al addresses the embodiment of claim 12.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3 Claim 1-10 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13, the solvent may be water or alcohol. If the applicant is seeking coverage for - - an aqueous soluble thermoplastic resin- -, then is should be claimed as such. If the applicant is attempting to claim - - a thermoplastic resin applied from aqueous solution- -, then the language should reflect that. The current language is unclear.

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5 Claims 1,3-6, 8-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. '598, in view of Mailloux et al. '047, Yu et al. EP 521296 and Nordeen et al. '440.

Ueda et al. '598 describe the laminate of figure 21, which comprise a peelable substrate (4), a hologram layer (2), an adhesive layer (55), a black light blocking layer (54) a second

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adhesive layer (56) and a removable substrate (53). (col. 18-19) Useful photopolymerizable volume holographic recording materials, such as omnidex-706 is disclosed. (13/13-15). The use of a colored transparent or opaque layer in place of the black layer, or the blackening/coloring of the adhesive layer itself is disclosed. (18/52-65). The black layer may be PET (18/40)

Mailloux et al. '047 teaches that an adhesive layer adjacent to the holographic layer should be heat activatable and chosen so that it will not migrate into the hologram. Useful adhesives include polyester and polyvinyl acetate ethylene adhesives. (6/19-33). Useful barrier layer materials include polymers. (5/59-6/9)

Yu et al. EP 521296 teaches that for photopolymerizable holographic recording media, water soluble protective layers are desired as protective/barrier layers (5/47-6/5) to protect the holographic recording layers from index matching fluids and other organic materials. (3/17-35).

Nordeen et al. '440 teach thermoplastics including vinyl acetates which function as adhesives and are preferably coated out of water for environmental reasons. (6/41-59). This is taught with respect to a transfer of surfaces bearing images onto other surfaces where they are adhered via adhesive layers. (decalomania)

It would have been obvious to one skilled in the art to modify the invention of figure 21 of Ueda et al. '598 by using an adhesive, such as ethylene polyvinyl acetate polymers taught by Mailloux et al. '047, as not containing materials which would migrate into the hologram and being coatable from aqueous solution for environmental reasons as taught by Nordeen et al. '440 and being water based would serve to protect the hologram from intrusion of organic molecules from adjacent layers as taught by Yu et al. EP 521296.

The applicants' arguments concerning the lack of a teaching in Ueda et al. '598 teach the use of an adhesive which is aqueous soluble or coated from an aqueous solvent system. The addition of Mailloux et al. '047, Yu et al. EP 521296 and Nordeen et al. '440 addresses this.

6        Claims 1-6, 8-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morii et al. '378 in view of Mailloux et al. '047, Yu et al. EP 521296 and Nordeen et al. '440.

Morii et al. '378 teach the laminate of figure 10b, which comprise a protective layer (7), an adhesive layer (5"), a hologram layer (6), a second adhesive layer (5'), a colored layer (9) a third adhesive layer (5) and a removable substrate (11) (illustrative example 5). Useful volume holographic recording materials are disclosed. (12/28-16/35). Useful adhesive layer materials include acrylic, acetate, gelatin, casein, polyvinyl acetate and hot melt resins. (12/7-27 and 33/49-65). The surface of the surface protective layer (7) may be provided with a release layer and a rigid film initially adhered to it and then peeled from it. (18/33-52). Figures 4 and 5 show the tearing of the holographic layer when delamination is attempted. The use of colored sheets as layer (9) is disclosed as providing a background color different from that of the hologram to enhance the contrast of the image. (26/46-57). Heat sealing resins include polyvinyl acetate (29/17-26). Adhesives which are useful include aqueous adhesives or water soluble adhesives (33/49-65) and specifically describes ethylene vinyl acetate hot melt adhesives.

It would have been obvious to one skilled in the art to modify the invention of figure 10b of Morii et al. '378 by using an adhesive, such as ethylene polyvinyl acetate polymers taught by Mailloux et al. '047, as not containing materials which would migrate into the hologram and being coatable from aqueous solution for environmental reasons as taught by Nordeen et al. '440 and being water based would serve to protect the hologram from intrusion of organic molecules

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from adjacent layers as taught by Yu et al. EP 521296, all of which relate well to the teachings of ethylene vinyl acetate, aqueous based adhesives and thermoplastic adhesives by Morii et al. '378 (33/49-65). Further it would have been obvious to one skilled in the art to modify the invention of illustrative example 10b by providing the surface protective layer (7) with a release layer and a peelable substrate based upon the disclosure to do so. The relative softening points of the adhesive layers are inherent as the medium does not come apart when applied.

The applicants' arguments concerning the lack of a teaching in Ueda et al. '598 teach the use of an adhesive which is aqueous soluble or coated from an aqueous solvent system. The addition of Mailloux et al. '047, Yu et al. EP 521296 and Nordeen et al. '440 addresses this.

7        Claims 1-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Ueda et al. '598 or Morii et al. '378, combined with Mailloux et al. '047, Yu et al. EP 521296 and Nordeen et al. '440 in view of Kushibiki et al. '285.

Kushibiki et al. '285 teach the provision of layer (5) which acts to provide a background color to the hologram and may be comprised of a metal or metal oxide (7/20-42).

It would have been obvious to one skilled in the art to modify the invention of figure 21 of Ueda et al. '598 or figure 10b, (illustrative example 5) of Morii et al. '378 combined with Mailloux et al. '047, Yu et al. EP 521296 and Nordeen et al. '440 as discussed above by using a background of a metal or metal oxide as taught by Kushibiki et al. '285 for use with volume holograms in place of the (red or black) dyed layer with a reasonable expectation of achieving comparable results.

The rejection stands without further comment as no further issues beyond those addressed above were offered by the applicant.

8        Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Ueda et al. '598 or Morii et al. '378, combined with Mailloux et al. '047, Yu et al. EP 521296, Nordeen et al. '440 and Kushibiki et al. '285, further in view of Kaule CA 2046711.

Kaule CA 2046711 teaches a holographic transfer film comprising a substrate (10), a separation layer (12), a protective film (14), an embossed layer (16), a metallic holographic layer (18), a protective layer (20) and an adhesive layer (22) and a peelable substrate (pages 5 and 6). The adhesive layer (22) may be colored black (page 6). The use of volume holographic materials, rather than embossed or relief holograms is disclosed. (page 6).

In addition to the basis provided above, it would have been obvious to modify the combination of either of Ueda et al. '598 or Morii et al. '378, combined with Mailloux et al. '047, Yu et al. EP 521296, Nordeen et al. '440 and Kushibiki et al. '285 as discussed above by coloring the outer adhesive layer, rather than have a separate color layer based upon the disclosure of equivalence by Kaule CA 2046711.

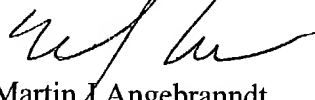
The rejection stands without further comment as no further issues beyond those addressed above were offered by the applicant.

9        Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebrannndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9309 for regular communications and 703-872-9309 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Martin J. Angebranndt  
Primary Examiner  
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August 18, 2004